

FORM PTO-1390 MODIFIED	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NUMBER <b>620-349</b>
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)  <b>10/516,335</b>
INTERNATIONAL APPLICATION NO. <b>PCT/GB03/02314</b>	INTERNATIONAL FILING DATE <b>29 May 2003</b>	PRIORITY DATE CLAIMED <b>30 May 2002</b>

TITLE OF INVENTION

**PHOTONIC SWITCH WORKING IN MOMENTUM-DIVISION-MULTIPLE-ACCESS (MDMA) MODE FOR MICROWAVE AND OPTICAL WAVELENGTHS BASED UPON THE MEASUREMENT OF THE SPIN, THE ORBITAL ANGULAR-MOMENTUM AND THE TOTAL ANGULAR MOMENTUM OF THE INVOLVED PHOTONS**

APPLICANT(S) FOR DO/EO/US

**PADGETT et al**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The U.S. has been elected (Article 31).
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto (        pages specification, claims & abstract (        claims),        sheets drawings).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(3))
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has **NOT** expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.
  - a. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
  - b. ☐ Declaration was submitted to the International Bureau during International Phase
10. ☐ An English language translation of the annexes of the Intl Prel. Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).  
**Items 11 To 20 below concern document(s) or information included:**
11. ☐ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
13.
  - a. ☐ A FIRST preliminary amendment.
  - b. ☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ An Application Data Sheet under 37 C.F.R. § 1.76.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☐ Other items or information.

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.53) <b>10/516,335</b>		INTERNATIONAL APPLICATION NO. <b>PCT/GB03/02314</b>		ATTORNEY'S DOCKET NUMBER <b>620-349</b>	
21. <input checked="" type="checkbox"/> The following fees are submitted:					
<b>BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5):</b>					
<input type="checkbox"/> a) Basic national fee .....				\$300.00 (1631)/\$150.00 (2631)	\$
<input type="checkbox"/> b) Examination Fee .....				\$200.00 (1633)/\$100.00 (2633)	\$
<input type="checkbox"/> c) Search Fee .....				\$500.00 (1632)/\$250.00 (2632)	\$
<b>TOTAL OF ABOVE CALCULATIONS .....</b>				<b>\$1000.00/\$500.00</b>	\$ 0.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
60 -100	0 /50 =	0.00		\$0.00 (1681) \$0.00 (2681)	
Surcharge of \$130.00 (1617)/\$65.00 (2617) for furnishing the oath or declaration later than <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)).					
CLAIMS		NUMBER FILED	# EXTRA	RATE	
Total Claims	16	minus 20 =	0 X	\$50.00 (1615)/	\$25.00 (2615)
Independent Claims	4	minus 4 =	0 X	\$200.00 (1614)	\$100.00 (2614)
MULTIPLE DEPENDENT CLAIMS(S) (if applicable)				\$360.00 (1616)/\$180.00 (2616)	
Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s): One Month Extension \$120.00 (1251)/\$60.00 (2251); Two Month Extensions \$450.00 (1252)/\$225.00 (2252); Three Month Extensions \$1020.00 (1253)/\$510.00 (2253); Four Month Extensions \$1590.00 (1254)/\$795.00 (2254)				\$ 0.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.					
Processing fee of \$130.00 (1618), for furnishing the English Translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(f)).				+ 0.00	
<b>TOTAL NATIONAL FEE =</b>				\$ 0.00	
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 (8021) per property				+ 80.00	
Fee for Petition to Revive Unintentionally Abandoned Application; \$1500.00 (1453) / \$750.00 (2453)				\$ 0.00	
<b>TOTAL FEES ENCLOSED =</b>				\$ 80.00	
				Amount to be: refunded \$	
				Charged \$	
a. <input type="checkbox"/> A check in the amount of \$80.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 14-1140 in the amount of \$_____ to cover the above fees. A duplicate copy of this form is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-1140. A duplicate copy of this form is enclosed. d. <input checked="" type="checkbox"/> <b>CREDIT CARD PAYMENT FORM ATTACHED.</b> e. <input checked="" type="checkbox"/> The entire content of International Application No. PCT/GB03/02314 and any U.S. and foreign application(s) corresponding thereto, and GB 0212551.6, referred to in this application is/are hereby incorporated by reference in this application. <b>NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b) must be filed and granted to restore the application to pending status.</b> <b>CORRESPONDENCE ADDRESS</b> <b>Direct all correspondence to:</b> <input checked="" type="checkbox"/> <b>Customer Number:</b> <span style="border: 1px solid black; padding: 2px 20px;"><b>23117</b></span> <div style="text-align: center; font-size: small;">Type Customer Number here</div>					
Telephone: (703) 816-4000 MJW:tat		<div style="font-family: cursive; font-size: 1.2em; margin-bottom: 5px;">Mary J. Wilson</div> <div style="border-top: 1px solid black; padding-top: 2px;"> <b>Mary J. Wilson</b>  NAME  <b>32,955</b> <span style="float: right;"><b>May 31, 2005</b></span>  REGISTRATION NUMBER <span style="float: right;">Date</span> </div>			